ERICSSON

A Global Roaming Plan (GRP)

Comments to FCC Interim Report

Some key drivers in spectrum design

- **Global roaming (mobility, universal applications, clarity)**
- **Economy of scale (price, quality, availability)**
- **End-user perception (terminal related, to guarantee success)**

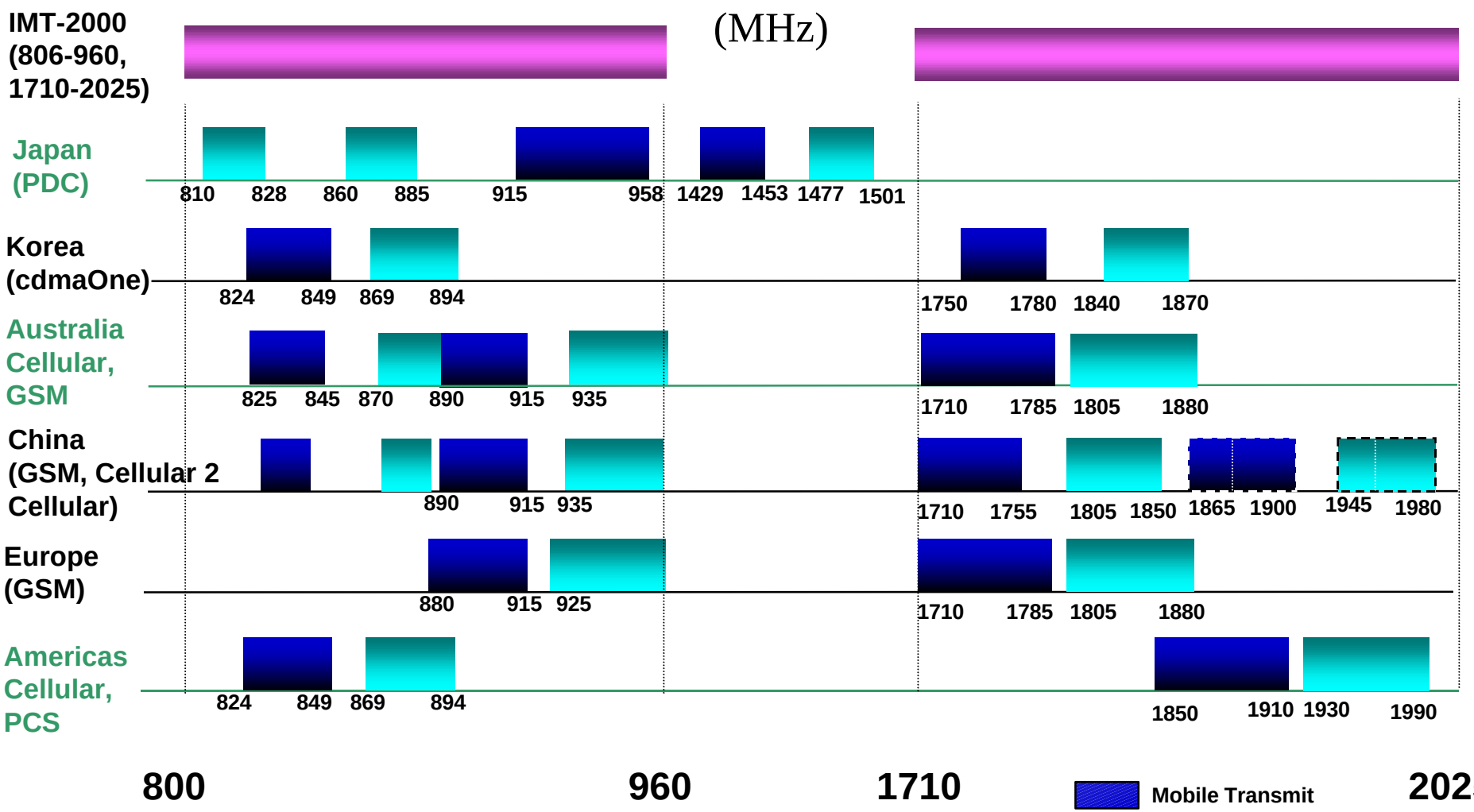
Some key elements with regard to the GRP

- **"Initial Phase": 1710-1770 MHz paired with 2110-2170 MHz**
- **Frequency arrangements for all three Regions - a Region 2 harmonization opportunity**
- **Neither limits nor favors IMT-2000 technology choices**
- **Step-by-step approach accommodating US timing**
- **Interim Report Options included in Plan**

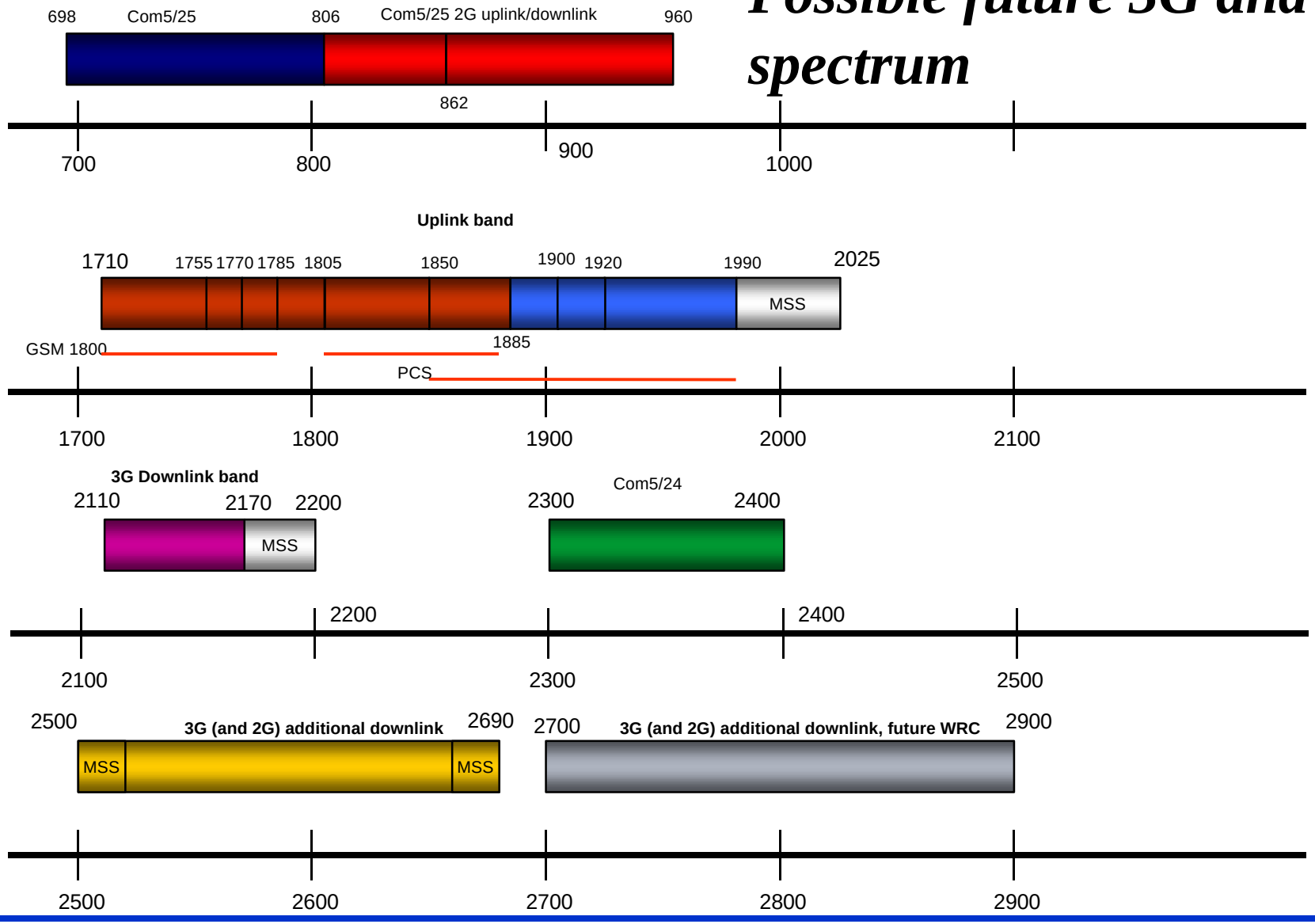
More key elements with regard to the GRP

- **The band 2500 - 2690 MHz as possible additional downlink**
- **Proposes additional bands for increased capacity and new entrants**
- **Flexibility in the implementation**
- **Facilitates expected traffic asymmetry**
- **Accommodates a possible transitional plan for PCS 1900 systems**

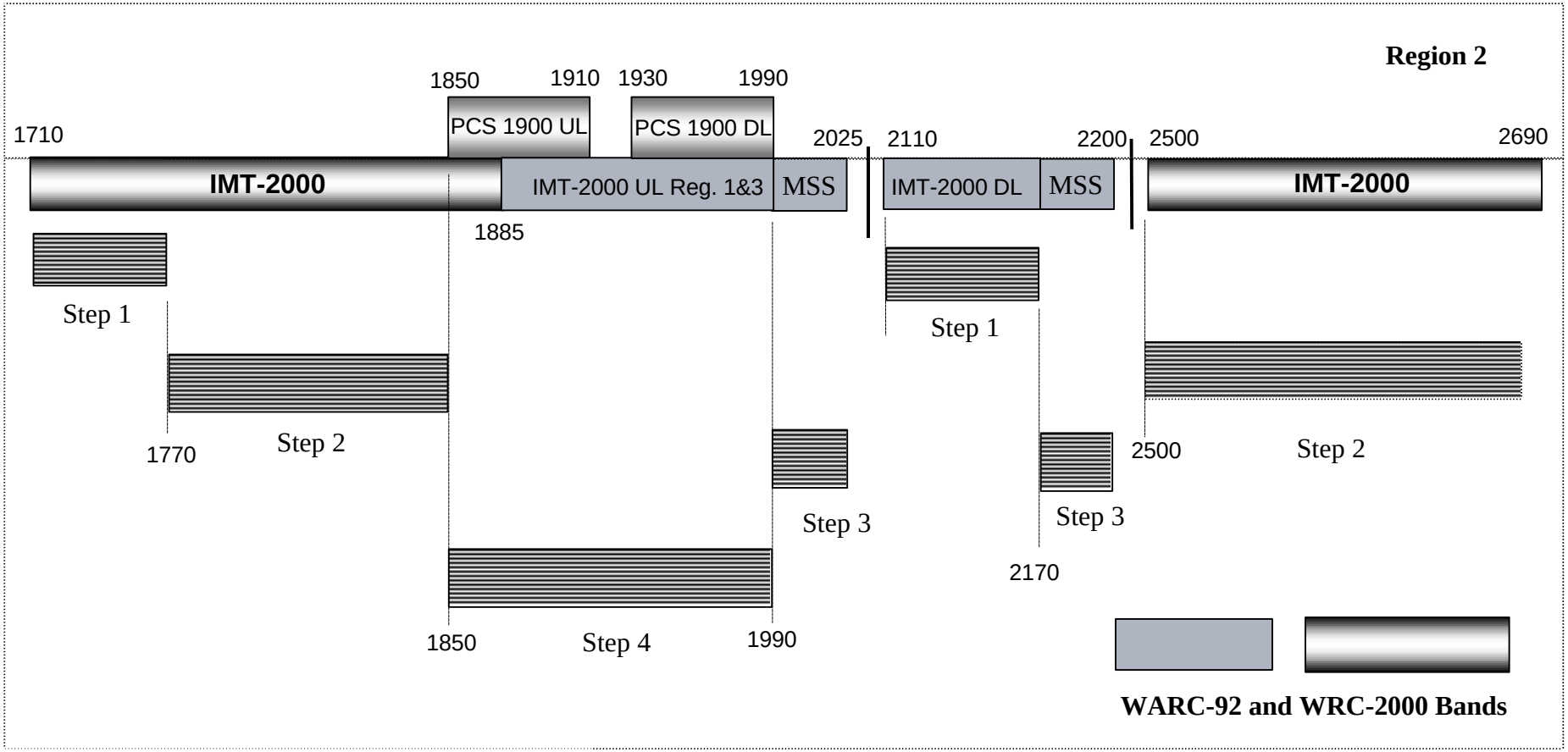
Spectrum Allocations for Current Mobile systems



Possible future 3G and 2G spectrum

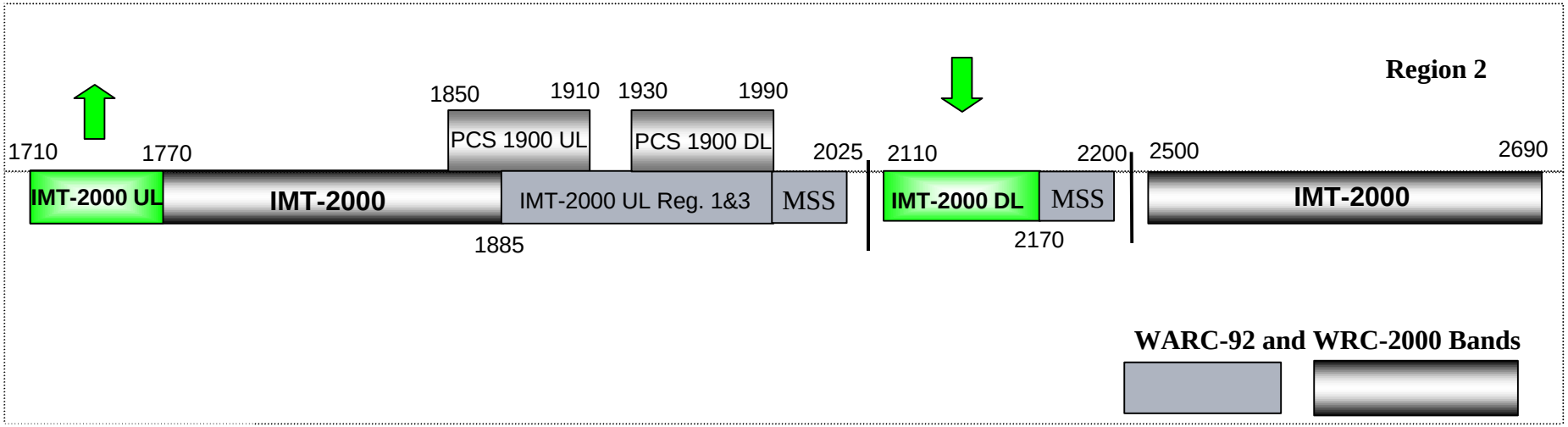


Global Roaming Plan (GRP)



Step 1: 1710-1770 MHz as UL and 2110-2170 MHz as DL
Step 2: 1770-1850 MHz as UL and 2500-2690 MHz as DL
Step 3: 1990-2025 MHz as UL and 2170-2200 MHz as DL
Step 4: 1850-1990 MHz as UL

Step 1. Initial Phase: 1710-1770 MHz paired with 2110-2170 MHz

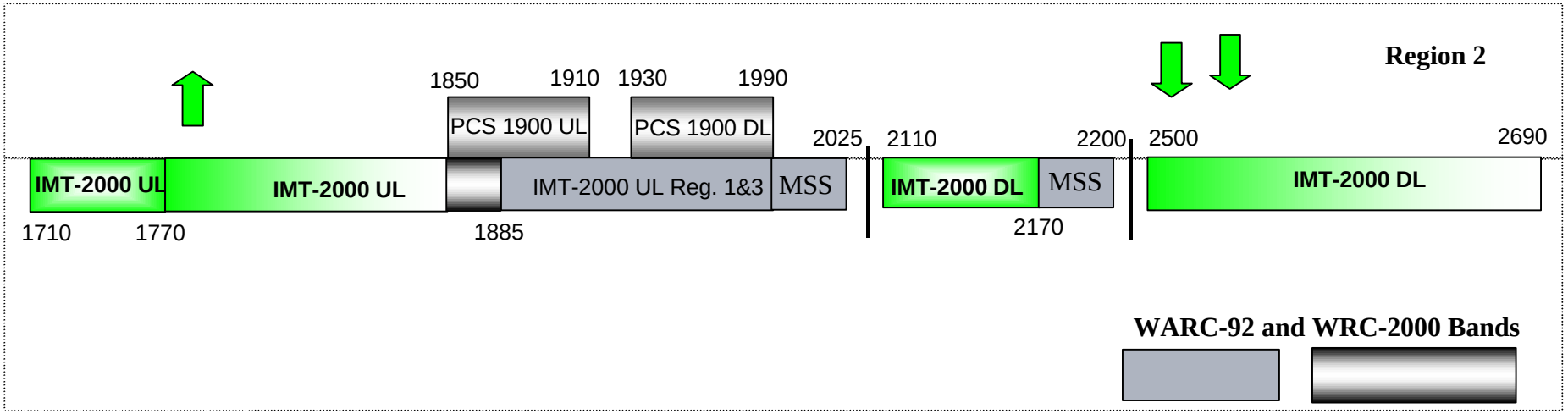


- **Common downlink enhances economy of scale, universal applications, facilitates new 3G entrants and global roaming with Region 1&3**

Step 2. Capacity and New Entrants

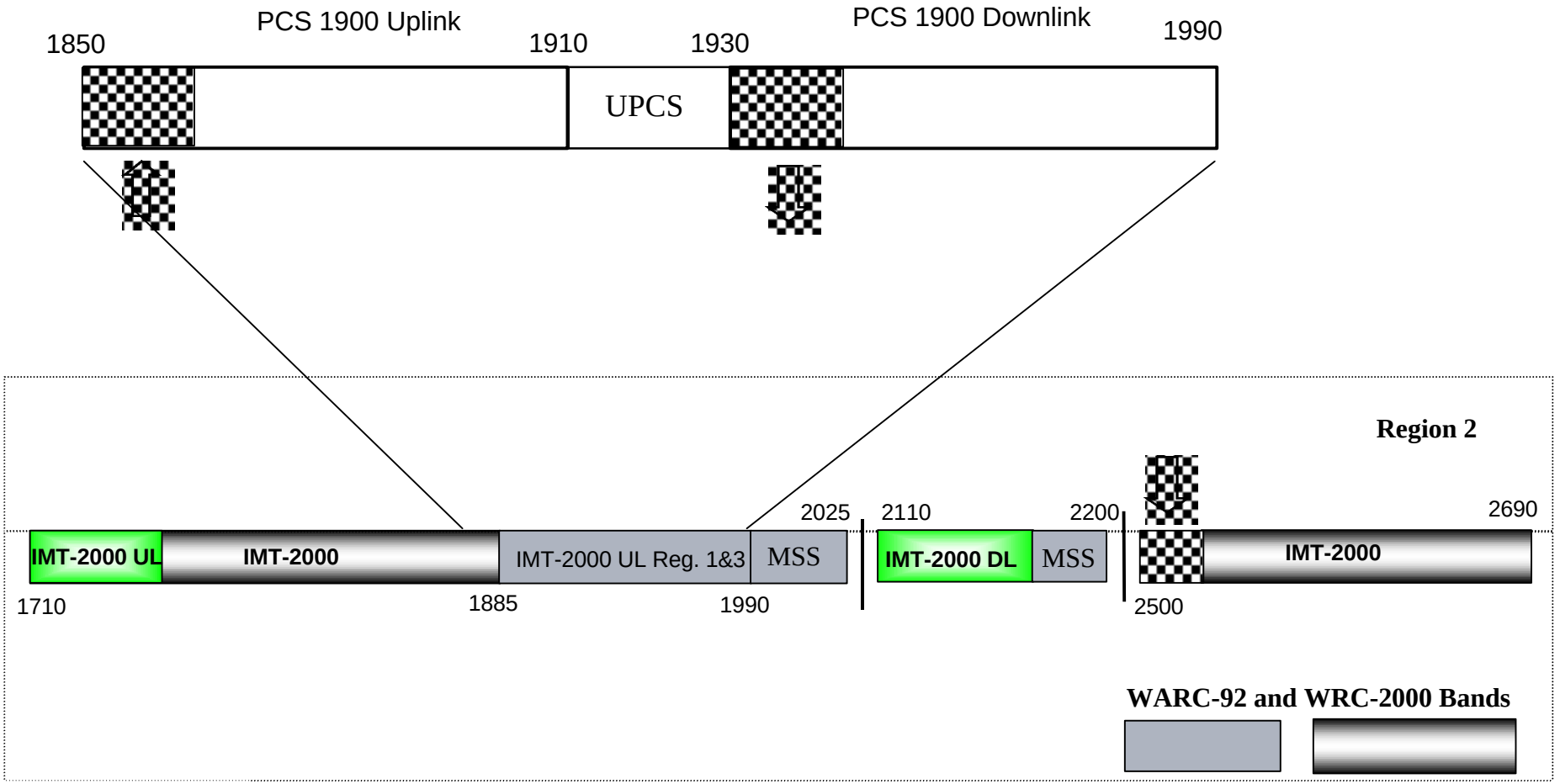
- **Based on Market Requirements:**
  - **2500 – 2690 MHz (or portions thereof) as downlink for new 3G entrants or additional downlink capacity for PCS 1900 system and existing Initial Phase operators.**
  - **1770 – 1850 MHz (or portions thereof) as additional uplink for new 3G entrants or to increase the capacity of Initial Phase operators.**

Step 2: Additional Capacity for Initial Phase and New Entrants

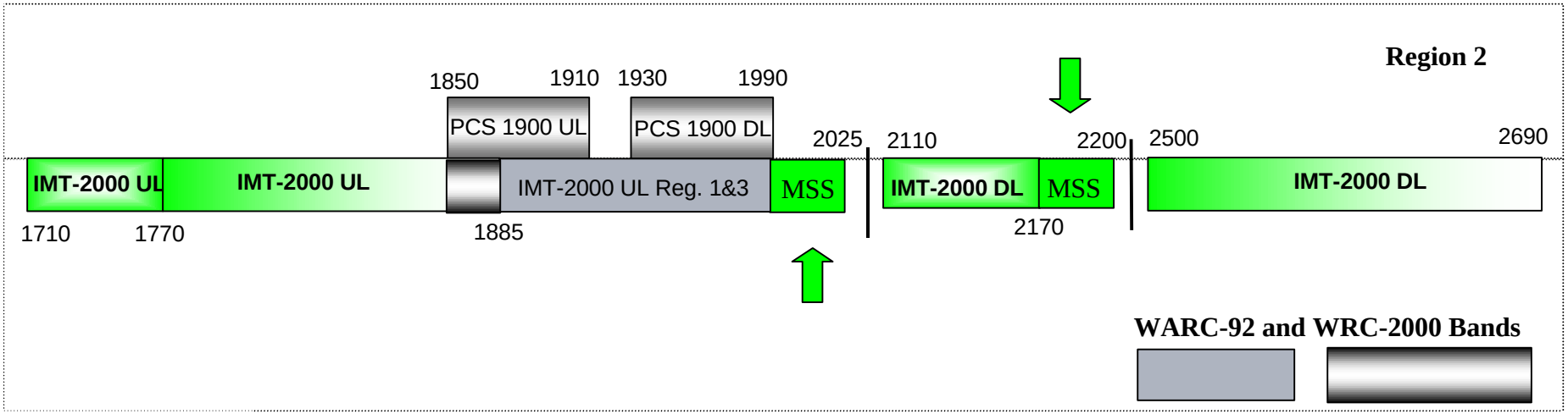


- **Additional Capacity for Initial Phase operators in the downlink**
- **New 3G entrants can be added**

Step 2: Additional Downlink Capacity for PCS



Step 3. Consider MSS Allocations



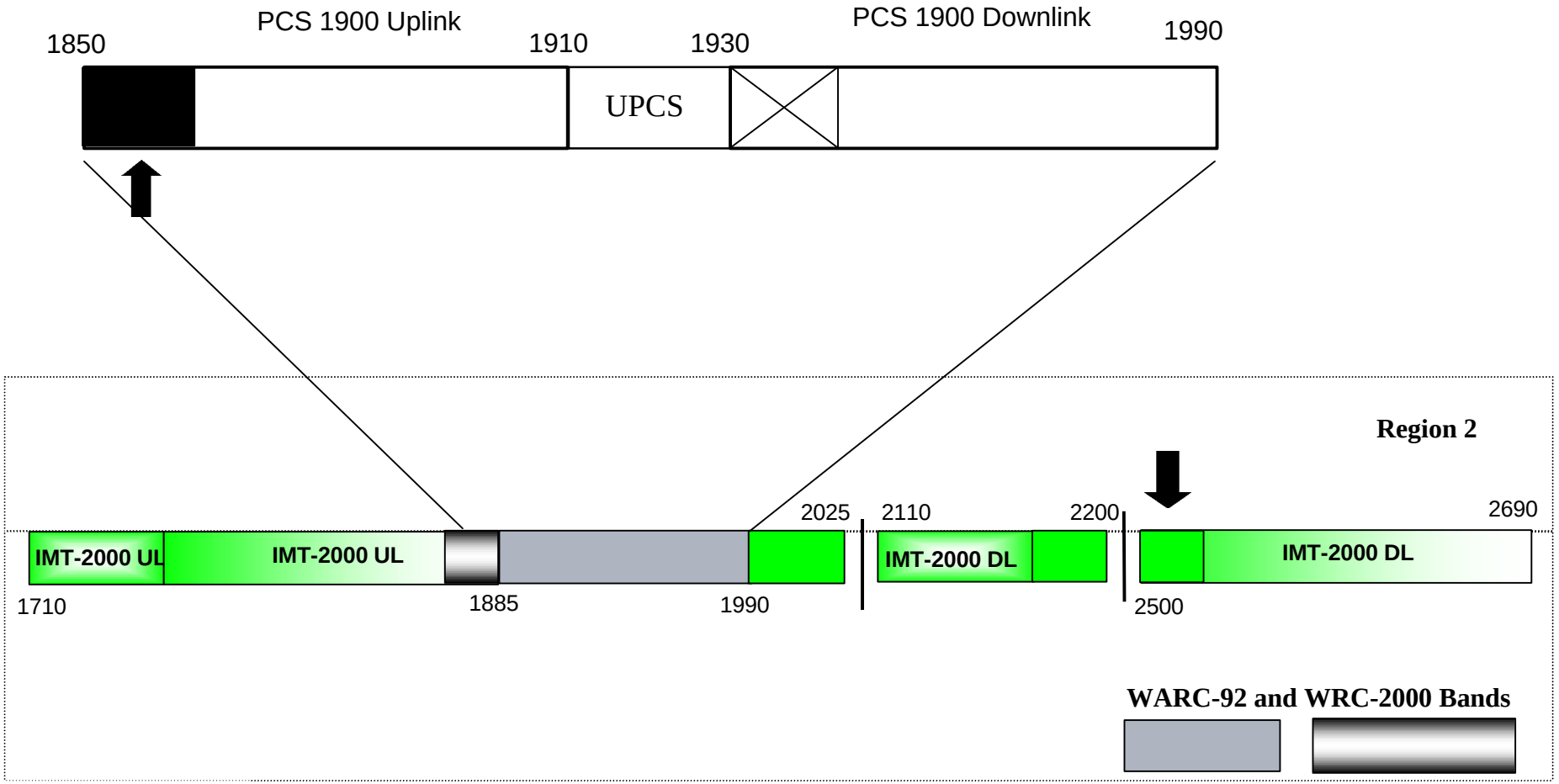
- **Based on Market demand, the MSS allocations can be considered for additional terrestrial spectrum for either capacity relief or new 3G entrants.**

Step 4. Optional PCS Transition

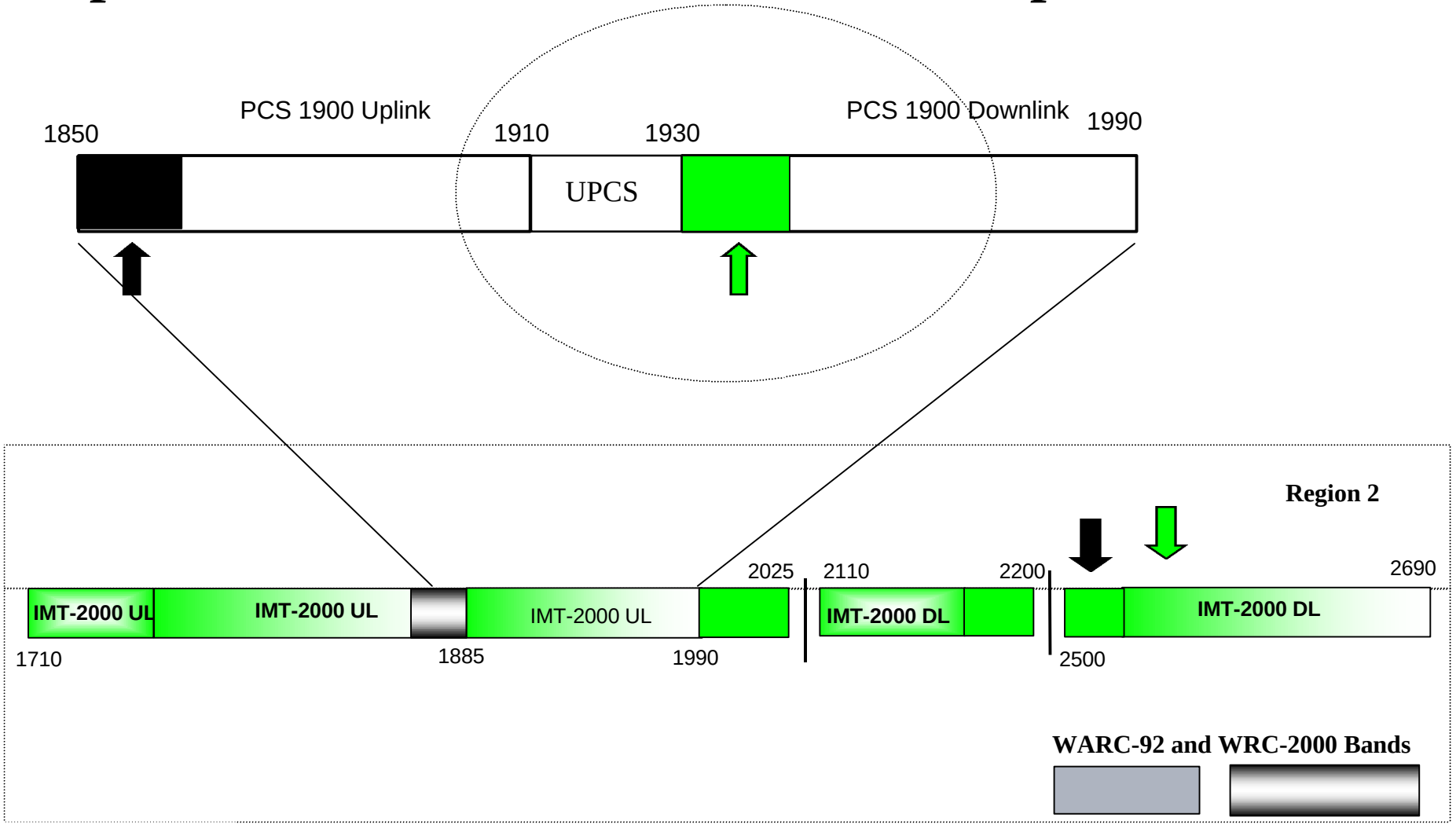
- **Existing PCS operators may consider transitioning to the GRP in the longer term* to:**
  - **Minimize the number of bands in the terminal equipment**
  - **Support new services**

*** Some operators may continue to support multiband terminals in 800 MHz.**

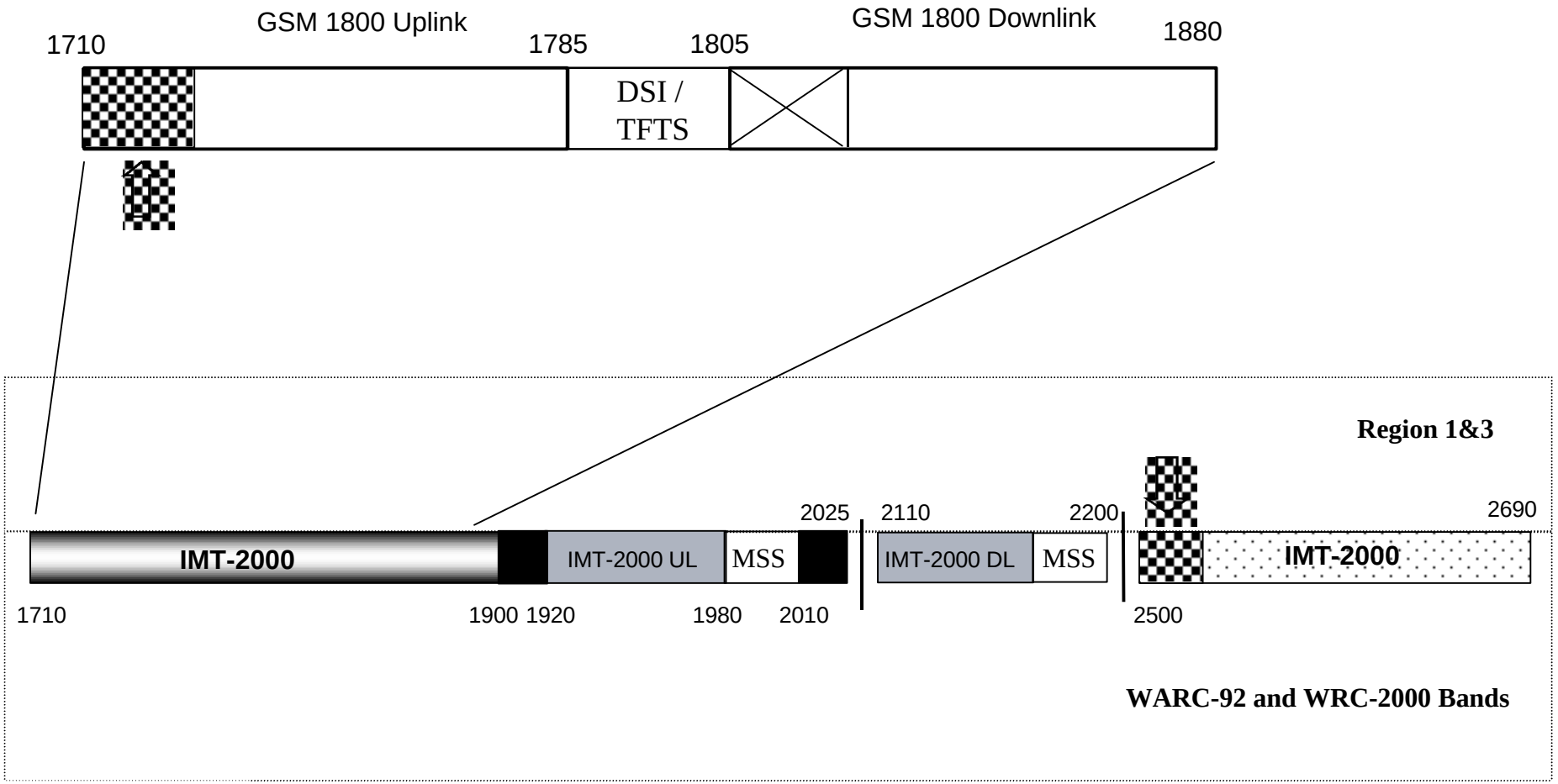
Step 4: PCS Transition to New Downlink



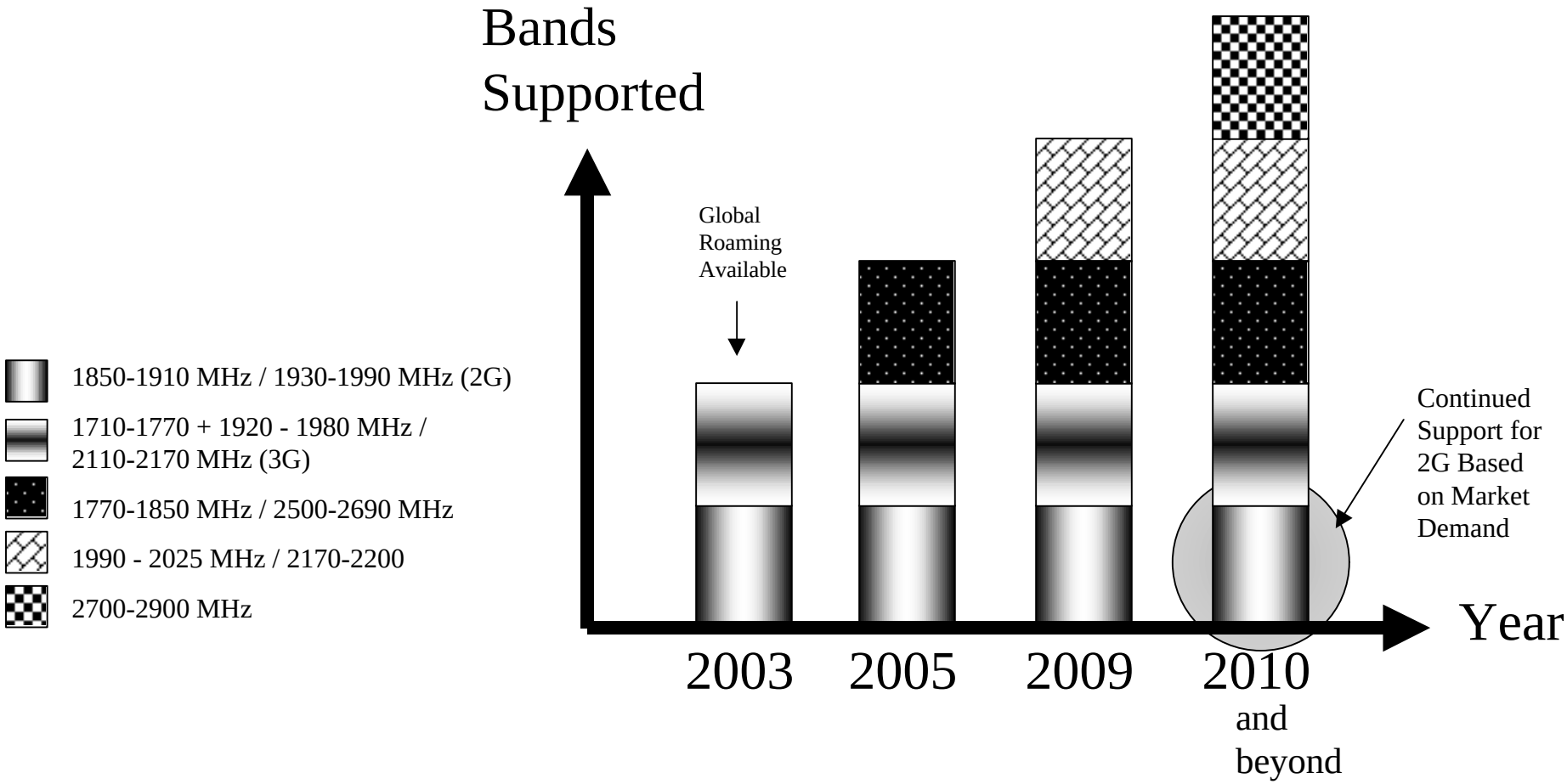
Step 4: Transition PCS Downlink to 3G Uplink



Step 4 - Reg. 1&3: GSM Transition to New Downlink



Region 2 Terminal Evolution



Where do we go from here?

- [x] **Global Roaming Plan (GRP) to be developed**
- [ ] **Support global approach to minimize isolation and regional fragmentation**
- [ ] **Make available the "Initial" phase, unencumbered, timely, and paired**
- [ ] **Analysis is required for subsequent phases to determine under what conditions 3G systems can share**

Some key issues for international preparatory fora

- **allow for *all* spectrum design proposals to be put on the table**
- **Harmonization between US and Europe is an opportunity that should be embraced**

FCC's leadership is desired to facilitate:

- **An Initial Phase pairing 1710-1770 MHz with 2110-2170 MHz**
- **A frequency arrangement for all three Regions - a Region 2 harmonization opportunity**
- **A step-by-step approach consistent with US market requirements**
- **Implementation of Interim Report Options as proposed in the Global Roaming Plan**